



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

National Institutes of Health  
National Cancer Institute  
Bethesda, Maryland 20892

May 23, 2000

Barrett N. Fountos  
U.S. Department of Energy  
Office of International Health Programs, EH-63/270CC  
19901 Germantown Road  
Germantown, MD 20874-1290

Dear Mr. Fountos:

Enclosed please find the Scientific and Management Progress Report for the time period 1 February 2000 to 30 April 2000 for the Chernobyl Research Program. I am also enclosing the most recent quarterly reports from the project Directors in Ukraine and Belarus, as well as the most recent quarterly report from Columbia University. Please feel free to contact me if you have any questions regarding this report.

Sincerely,

Terry L. Thomas, Ph.D.  
Senior Staff Scientist  
Chernobyl Research Unit  
Radiation Epidemiology Branch, NCI  
EPS, Room 7100  
6120 Executive Boulevard  
Rockville, MD 20852-7238  
Phone: 301-594-7658



Chornobyl Research Program  
SCIENTIFIC AND MANAGEMENT PROGRESS REPORT  
1 February 2000 to 30 April 2000

Submitted by:

Terry L. Thomas, Ph.D.

Date:

23 May 2000

I. Progress on "Epidemiologic Studies of Radiation Induced Thyroid Disease in Belarus (BelAm Thyroid Project) and Ukraine (UkrAm Thyroid Project)

A. BelAm Thyroid Project

The study began in 1997 with the selection of individuals to be included in the study cohort from the file of thyroid dose measurements at the Institute of Biophysics in Moscow (Selection 1). Numerous sources were used to trace subjects, and current addresses were located for 14,033 of these subjects as of December 31, 1999. Selection 1 has not resulted in a sufficient number of responses to achieve the target cohort size of 12,000 subjects. Thus, in December 1999, the remainder of individuals in the dose file were selected and were traced for current address (Selection 2). Subjects from Selection 1 who were not previously located were traced along with Selection 2 during the quarter. Of 13,979 subjects who were traced through address bureaus, 5,726 (38%) were still known to be living in the study area. Invitation letters were sent to 3,536 subjects during the quarter, and 1,431 of them were screened (1,320 for the first time), bringing the total number of screening examinations conducted to about 9,000 (7,349 screened for the first time, 1,464 screened for the second time, and 206 subjects reporting for follow-up of abnormal findings). An additional 1,521 subjects gave preliminary consent to be screened. Exit interviews of 100 subjects indicated that approximately one-half had to travel more than one hour to reach the place of examination. The duration of the examination was reasonable on average; however, a large percentage of subjects expressed interest in receiving more information about the study, about the results of their examination from the examining physician, and in being reimbursed for their travel expenses. The Project Director has been encouraged to develop a brochure describing the project and to add incentives, such as reimbursement for travel. As of 30 April 2000, newly diagnosed thyroid cancer was found in 36 of the screened subjects. Data entry is from 86% to 99% complete for most of the data collection forms for subjects who have been screened.

A revised dosimetry questionnaire has been prepared by a team of Belarussian and Ukrainian dosimetrists; it will be finalized at the joint Belarussian-Ukrainian dosimetry meeting to be held in May 2000.

## B. UkrAm Thyroid Project

The study in Ukraine began also in 1997 with the selection of 20,071 subjects (Selection 1) to be included in the study cohort selected from the list of people with thyroid dose measurements. Tracing efforts resulted in the location of 13,493 subjects. Because Selection 1 did not generate sufficient response to achieve the target study population size, a second selection of 20,000 subjects (Selection 2) was taken in January 2000. These subjects were traced for current address. The brochure with a logo for the study developed in the previous quarter, and is now being routinely sent with new invitation letters which offer reimbursement for travel expenses (equivalent to US \$5). This letter has been sent to subjects not yet invited for examination as well as those who previously refused or didn't respond. As of 30 April 2000, a total of 7,615 subjects (411 of them from Selection 2) had been examined, approximately 2,700 of them since the beginning of January 2000; thus the screening rate has increased remarkably, numbering as many as 850 in one month. By the end of February 2000, 13 newly diagnosed thyroid carcinomas were identified in the study cohort, 4 of them between December 1999 and February 2000. Seven subjects had benign thyroid lesions. The Ukrainians were provided with the new quarterly report format in March and will use it for their next report. A revised dosimetry questionnaire was submitted with the Project Director's progress report and will be finalized at the joint Belarussian-Ukrainian dosimetry meeting to be held in May 2000.

## C. Other Progress

American scientists visited Belarus in February 2000 to review epidemiologic and data management activities. The data coordinating center developed a draft of the data documentation which is currently being reviewed by American scientists. Procedures for data editing and correction of errors were reviewed by American scientists, and additional data edits were suggested.

American scientists also visited Belarus and Ukraine in March 2000 to review the progress made by the dosimetry teams in the two countries and to participate in a joint thyroid dosimetry meeting in Kyiv. It was decided inter alia to continue the program of inter-comparison exercises based on scenarios and to develop a joint system of individual dose estimation.

The American project director accompanied by an administrative team from Columbia University visited Belarus and Ukraine in March to discuss administrative matters in both countries. The primary purpose was to implement new procedures for ordering supplies and equipment. At this time, the proposed new quarterly report format was presented to the project directors. In addition in Belarus, a new financial arrangement was proposed for the year 2000, the need for developing a partnership with the International Science and Technology Center was stressed, and final plans for training of a member of the epidemiology staff were made.

A semi-annual plenary session to assess study progress is planned for June in both countries. A team of U.S. scientists will participate in a series of discussions and workshops for approximately three days in each country.

II. Progress on “Study of Leukemia, Lymphoma, and Related Disorders in Ukrainian Clean-up Workers Following the Chornobyl Accident”

The protocol for phase 2 of the study of leukemia among liquidators is in its final stages of development. It was approved by NCI’s Chornobyl Oversight Panel with minor modifications. The dosimetry questionnaire is being reviewed by NCI epidemiologists and other experts.

The Ukrainian team has vigorously pursued the tasks agreed upon for the interim period between the end of phase 1 and the beginning of phase 2. Investigators have visited several of the study Oblasts to discuss the phase 2 plan with the local public health services, regional oncology dispensaries, the local departments of the Chornobyl State Registry; to determine the potential sources of information for constructing the Leukemia Registry; to select the local staff persons who will work on the study and acquaint them with the objectives of the study. In all Oblasts visited as of the date of this report, the consent of local health officials was obtained, the sources of information on leukemia cases were identified, and the local staff persons were selected.